

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Dominique Charmot et al.
Serial No.: 10/814,749
Filed: March 30, 2004
Confirmation No.: 7226
For: ION BINDING COMPOSITIONS
Examiner: Micah Paul Young

Art Unit: 1618

August 24, 2010

REPLY BRIEF

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This Reply Brief is filed pursuant to 37 C.F.R. § 41.41 in response to the Examiner's Answer dated June 24, 2010. In particular, this Reply Brief is filed to respond to some of the Examiner's comments set forth in the Response to Argument section starting on page 9 of the Examiner's Answer. This Reply Brief is supplemental to and not a replacement for the Appeal Brief filed March 18, 2010.

I. STATUS OF CLAIMS

Claims 3, 4, 15, 21, 29, 30, 34, 40, 51-64 and 66-76 are pending. Claims 1-2, 5-14, 16-20, 22-28, 31-33, 35-39, 41-50, and 65 are canceled. A copy of the pending claims appears in the Claims Appendix of the Appeal Brief.

Claims 3, 4, 15, 21, 29, 30, 34, and 51-59, 62-64, 66-73, and 76 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Notenbomer (EP 0 730 494) in view of Cohen et al. (U.S. Patent No. 6,558,665). Claims 3, 34, 40, and 53 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Notenbomer (EP 0 730 494) in view of Cohen et al. (U.S. Patent No. 6,558,665) and Chong et al. (U.S. Patent No. 4,389,590). Claims 3, 53, 60, 61, 74, and 75 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Notenbomer (EP 0 730 494) in view of Cohen et al. (U.S. Patent No. 6,558,665), Shimizu et al. (U.S. Patent No. 5,824,339) and Macek et al. (U.S. Patent No. 3,499,960).

The rejections of claims 3, 4, 15, 21, 29, 30, 34, 40, 51-64, and 66-76 under U.S.C. § 103(a) are being appealed.

II. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Appellants appeal the rejection of claims 3, 4, 15, 21, 29, 30, 34, and 51-59, 62-64, 66-73, and 76 under 35 U.S.C. § 103(a) as being unpatentable over Notenbomer (EP 0 730 494) in view of Cohen et al. (U.S. Patent No. 6,558,665). Appellants further appeal the rejection of claims 3, 34, 40, and 53 under 35 U.S.C. § 103(a) as being unpatentable over Notenbomer (EP 0 730 494) in view of Cohen et al. (U.S. Patent No. 6,558,665) and Chong et al. (U.S. Patent No. 4,389,590). Also, Appellants appeal the rejection of claims 3, 53, 60, 61, 74, and 75 under 35 U.S.C. § 103(a) as being unpatentable over Notenbomer (EP 0 730 494) in view of Cohen et al. (U.S. Patent No. 6,558,665), Shimizu et al. (U.S. Patent No. 5,824,339) and Macek et al. (U.S. Patent No. 3,499,960).

III. ARGUMENT

The following arguments in response to the Examiner's Answer are supplemental to and not a replacement for the arguments in the Appeal Brief filed March 18, 2010. Appellants' decision to not specifically address each and every argument raised by the Examiner in the Examiner's Answer should not be construed as an agreement therewith.

35 U.S.C. § 103 Rejection over Notenbomer in view of Cohen

Claims 3, 4, 15, 21, 29, 30, 34, 51-59, 62-64, 66-73, and 76 are patentable over Notenbomer (EP 0 730 494) in view of Cohen et al. (U.S. Patent No. 6,558,665) under 35 U.S.C. § 103(a).

The Examiner's Answer asserts that

Appellant has defined the filed [field] of endeavor too narrowly. The field of endeavor is simply the removal of compounds from the body using coated particles, which is a very similar pharmaceutical use. The '494 patent removes ions from the body using cation exchange resin cores that are coated. The '665 patent removes harmful compounds and metabolites using similarly coated core-shell particles. These patents solve the same problem with similar compositions. One skilled in the coated particles for pharmaceutical use would look to similar references to describe what coating thickness are routinely used and/or inherently provided by standing [standard] coating techniques of the art.¹

The Cohen patent is directed to methods of coating particles in order to develop coated cells for transplantation for treating various diseases, particularly coating islet cells for treating diabetes. The encapsulation of the cells by the coating provides "immunoisolation of the cell by providing a semi-permeable barrier between the host and the transplanted tissue."² While the Office states that the reason the Cohen patent and the Notenbomer patent can be combined is because removal of compounds from the body using coated particles is a similar pharmaceutical use, this reason does not place Applicants' invention in the same field as the Cohen patent or address the still different problem discussed in the Notenbomer patent. For example, Cohen discusses removal of toxins or harmful metabolites from the bloodstream by use of cells such as hepatocytes.³ Hepatocytes are the main tissue cells of the liver and are involved in protein synthesis and storage, transformation of carbohydrates, synthesis of cholesterol, bile salts, and phospholipids, and detoxification, modification, and excretion of exogenous and endogenous substances. Thus, while the toxins are removed from the bloodstream, they are not necessarily removed from the body, but are more accurately transformed into other compounds within the body. Further, unlike Notenbomer's particles or the instant particles, the Cohen particles are not administered

¹ See Examiner's Answer dated June 24, 2010 at page 11.

² See U.S. Patent No. 6,558,665 at column 8, lines 26-28.

³ U.S. Patent No. 6,558,665 at column 10, line 9.

orally or rectally and the compounds are not removed by transit of the particles through the gastrointestinal tract. The Cohen particles are implanted in the body and removal of the particles from the body is not described by Cohen. Thus, the Examiner's reason for combining the Cohen and Notenbomer references is not based on an accurate reading of the Cohen patent.

Applicants stand by arguments in the Appeal Brief

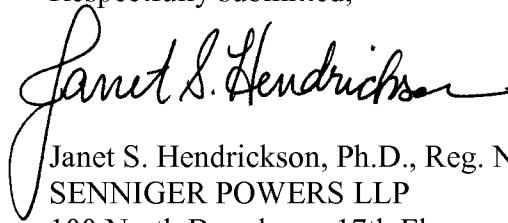
Applicants have submitted arguments in reply to some of the arguments in the Examiner's Answer in an effort to clarify certain aspects of the Examiner's reading of the cited references. Applicants believe their position with respect to some of the arguments in the Examiner's Answer is clear by reference to the Appeal Brief. Thus, applicants have not deemed it necessary to reply to every argument raised in the Examiner's Answer.

IV. CONCLUSION

For the reasons stated above and in the Appeal Brief previously submitted, Appellants respectfully request that the Office's 35 U.S.C. § 103(a) obviousness rejection of claims 3, 4, 15, 21, 29, 30, 34, 40, 51-64, and 66-76 be reversed.

The Commissioner is hereby authorized to charge any additional fees which may be required to Deposit Account No. 19-1345.

Respectfully submitted,

A handwritten signature in black ink, reading "Janet S. Hendrickson", with a stylized flourish at the end.

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